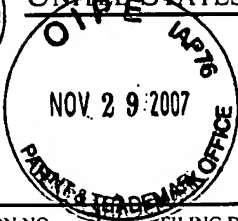




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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|--------------------------------|------------------------|
| 10/711,292 | 09/08/2004 | Erik Wayne Johnson | | 5291 |
| 43786 | 7590 | 11/16/2007 | | |
| MIKE W. FYNBOH AND ERIK W. JOHNSON 2906 OLD HIGHWAY 8 ROSEVILLE, MN 55113 | | | EXAMINER STORMER, RUSSELL D | |
| | | | ART UNIT 3617 | PAPER NUMBER |
| | | | MAIL DATE 11/16/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 10/711,292 | Applicant(s) JOHNSON ET AL. | |
| | Examiner Russell D. Stormer | Art Unit 3617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Drawings

The drawings are objected to because the reference characters should be in the form of numerals. While reference letters are acceptable, numerals are preferred by the office as these are easier to find in the specification and do not interfere with text searching of the document.

See MPEP 608.01(f) and 37 CFR 1.74.

The drawings are not in compliance with 37 CFR 1.121 because they are not labeled as "Replacement Sheets." Terms such as "new sheet" and "revised sheet" are not proper.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The abstract is objected to because it is not submitted on a separate sheet as required. See MPEP 608.01.

The disclosure is objected to because the reference characters should be in the form of numerals, not letters, to point out the features in the drawings.

Appropriate correction is required.

II. MANNER OF MAKING AMENDMENTS UNDER 37 CFR 1.121

All amendments filed on or after July 30, 2003 must comply with 37 CFR 1.121 as revised in the notice of final rule making published in the Federal Register on June 30, 2003 at 65 Fed. Reg. 38611. The manner of making amendments has been revised to assist in the implementation of beginning-to-end electronic image processing of patent applications. Specifically, changes have been made to facilitate electronic image data capture and processing and streamline the patent application process. If an amendment filed on or after July 30, 2003 does not comply with revised 37 CFR 1.121, the Office will notify applicants via a Notice of Non-Compliant Amendment that the amendment is not accepted.

The revised amendment practice is summarized as follows.

A. Amendment Sections

Each section of an amendment document (e.g., Specification Amendments, Claim Amendments, Drawing Amendments, and Remarks) must begin on a separate sheet to

facilitate separate indexing and electronic scanning of each section of an amendment

document for placement in an image file wrapper. It is recommended that applicants use the following format when submitting amendment papers. The amendment papers should include, in the following order:

(A) **a cover sheet**, or introductory comments, providing the appropriate application information (e.g., application number, applicant, filing date) and which serves as a table of contents to the amendment document by indicating on what page of the amendment document each of the following sections begin;

(B) **a section (must begin on a separate sheet) entitled "Amendments to the Specification"** (if there are any amendments to the specification). This section should include all amendments to the specification including amendments to the abstract of the disclosure;

(C) **a section (must begin on a separate sheet) entitled "Amendments to the Claims"**

which includes a complete listing of all claims ever presented in the application (if there are any amendments to the claims);

- (D) a section (must begin on a separate sheet) entitled “Amendments to the Drawings” in which all changes to the drawings are discussed (if there are any amendments to the drawings);
- (E) a remarks section (must begin on a separate sheet); and
- (F) any drawings being submitted including any “Replacement Sheet,” “New Sheet,” or “Annotated Sheet.”

B. Amendments to the Specification

Amendments to the specification, other than the claims, computer listings (37 CFR 1.96) and sequence listings (37 CFR 1.825), must be made by adding, deleting or replacing a paragraph, by replacing a section, or by a substitute specification. In order to delete, replace or add a paragraph to the specification of an application, the amendment must unambiguously identify the paragraph to be modified either by paragraph number (see MPEP § 608.01), page and line, or any other unambiguous method and be accompanied by any replacement or new paragraph(s). Replacement paragraphs must include markings to show the changes. A separate clean version of any replacement paragraphs is not required. Any new paragraphs must be presented in clean form without any markings (i.e., underlining).

Applicants are also permitted to amend the specification by replacement sections (e.g., as provided in 37 CFR 1.77(b), 1.154(b), or 1.163(c)). As with replacement paragraphs, the amended version of a replacement section is required to be provided with markings to show all the changes relative to the previous version of the section. The text of any added subject matter must be shown by underlining the added text. The

text of any deleted subject matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show the deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived.

Applicants are also permitted to amend the specification by submitting a substitute specification, provided the requirements of 37 CFR 1.125(b) and (c) are met. Under 37 CFR 1.125, a clean version of the substitute specification, a separate marked up version showing the changes in the specification relative to the previous version, and a statement that the substitute specification contains no new matter are required.

C. Amendments to the Claims

Each amendment document that includes a change to an existing claim, including the

deletion of an existing claim, or submission of a new claim, must include a complete listing of all claims ever presented (including previously canceled and non-entered claims) in the application. After each claim number, the status identifier of the claim must be presented in a parenthetical expression, and the text of each claim under examination as well as all withdrawn claims (each with markings if any, to show current changes) must be presented. The listing will serve to replace all prior versions of the claims in the application.

(A) Status Identifiers: The current status of all of the claims in the application, including any previously canceled or withdrawn claims, must be given. Status is

indicated in a parenthetical expression following the claim number by one of the following status identifiers: (original), **(currently amended)**, (previously presented), (canceled), (withdrawn), **(new)**, or (not entered). The status identifier (withdrawn – currently amended) is also acceptable for a withdrawn claim that is being currently amended. See paragraph (E) below for acceptable alternative status identifiers.

Claims added by a preliminary amendment must have the status identifier (new) instead of (original), even when the preliminary amendment is present on the filing date of the application and such claim is treated as part of the original disclosure. If applicant files a subsequent amendment, applicant must use the status identifier (previously presented) if the claims are not being amended, or (currently amended) if the claims are being amended, in the subsequent amendment. Claims that are canceled by a preliminary amendment that is present on the filing date of the application are required to be listed and must have the status identifier (canceled) in the preliminary amendment and in any subsequent amendment. The status identifier (not entered) is used for claims that were previously proposed in an amendment (e.g., after-final) that was denied entry.

For any amendment being filed in response to a restriction or election of species requirement and any subsequent amendment, any claims which are non-elected must have the status identifier (withdrawn). Any non-elected claims which are being amended must have either the status identifier (withdrawn) or (withdrawn – currently amended) and the text of the non-elected claims must be presented with

markings to indicate the changes. Any non-elected claims that are being canceled must have the status identifier (canceled).

(C) **Claim Text:** The text of all pending claims under examination and withdrawn claims must be submitted each time any claim is amended. The text of pending claims not being currently amended, including withdrawn claims, must be presented in clean version, i.e., without any markings. Any claim presented in clean version will constitute an assertion that it has not been changed relative to the immediate prior version except to omit markings that may have been present in the immediate prior version of the claims. **A claim being canceled must be indicated as "canceled;" the text of the claim must not be presented.** Providing an instruction to cancel is optional. Canceled and not entered claims must be listed by only the claim number and status identifier, without presenting the text of the claims. When applicant submits the text of canceled or not-entered claims in the amendment, the Office may accept such an amendment, if the amendment otherwise complies with 37 CFR 1.121, instead of sending out a notice of non-compliant amendment to reduce the processing time.

(D) **Claim Numbering:** All of the claims in each amendment paper must be presented in ascending numerical order. Consecutive canceled or not entered claims may be aggregated into one statement (e.g., Claims 1 – 5 (canceled)).

A canceled claim can be reinstated only by a subsequent amendment presenting the claim as a new claim with a new claim number. The original numbering of the claims must be preserved throughout the prosecution. When claims are canceled, the

remaining claims must not be renumbered. For example, when applicant cancels all of the claims in the original specification and adds a new set of claims, the claim listing must include all of the canceled claims with the status identifier (canceled) (the cancelled claims may be aggregated into one statement). The new claims must be numbered consecutively beginning with the number next following the highest numbered claim previously presented (whether entered or not) in compliance with 37 CFR 1.126.

Example of listing of claims:

Claims 1-2 (canceled)

Claim 3 (new): A process for molding a bucket.

D. Amendments to the Drawing

Any changes to an application drawing must comply with 37 CFR 1.84 and must be submitted on a replacement sheet of drawings, even when applicant is only submitting better quality drawings without any substantive changes. Any additional new drawings must be submitted on a new sheet of drawings. The replacement or new sheet of drawings must be an attachment to the amendment document and must be identified in the top margin as "Replacement Sheet." The new drawing sheet must be identified in the top margin as "New Sheet." The replacement drawing sheet must include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended."

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be included. The marked-up copy must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change to the drawings. A marked-up copy of any amended drawing figure, including annotations indicating the changes made, must be provided when required by the examiner.

An explanation of the changes made must be presented in the "Amendments to the Drawings" or the remarks section of the amendment document. If the changes to the drawing figure(s) are not approved by the examiner, applicant will be notified in the next Office action. Applicant must amend the brief and detailed description of drawings sections of the specification if they are not consistent with the changes to the drawings. For example, when applicant files a new drawing sheet, an amendment to the specification is required to add the brief and detailed description of the new drawings. The proposed drawing correction practice has been eliminated. For any changes to the drawings, applicant is required to submit a replacement sheet of drawings with the changes made. No proposed changes in red ink should be submitted. Any proposed drawing corrections will be treated as non-compliant under 37 CFR 1.121(d). In response to any drawing objections, applicant should submit drawing changes by filing a replacement sheet of drawings or a new sheet of drawings with the corrections made. A letter to the official draftsman is no longer required.

Drawing submissions without any amendments to the specification and claims after allowance should be forwarded to the Office of Patent Publication.

Response to Amendment

Claims 1 and 2 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

The following claims 3 and 4, drafted by the examiner and considered to distinguish patentably over the art of record in this application, are presented to applicant for consideration:

Claims 1 and 2 (cancelled).

Claim 3 (new) A mechanism for rotating a rotational component on a wheel rim comprising:

 a first sprocket mounting for rotation on a first shaft, the first sprocket and shaft comprising a first set, the first shaft extending from the center of the wheel;

 a second set comprising a two second sprockets mounted for rotation on a second shaft, with one of said second sprockets and engaged with the first sprocket;

a third set comprising two third sprockets mounted for rotation on a third shaft, with one of said third sprockets engaged with the other of said second sprockets;

a fourth set comprising a single fourth sprocket mounted for rotation on a fourth shaft, said fourth sprocket engaging the other of said third sprockets, and said fourth shaft receiving said rotational component; whereby

the interengagement of the first, second, third, and fourth sprockets will cause said rotational component to rotate in a direction opposite from the rotational direction of said wheel.

Claim 4 (new) The mechanism for rotating a rotational component on a wheel rim as set forth in claim 3, further comprising:

the first one of second sprockets being engaged with the first sprocket to rotate counter to the first sprocket;

the first one of said third sprockets being engaged with the other of said second sprockets to rotate counter to said other one of said second sprockets;

the fourth sprocket being engaged with the other one of said third sprockets to rotate counter to said other of said third sprockets;

the first and third sprockets rotating in the same direction as the rotation of the wheel, and the second and fourth sprockets rotating in a direction opposite the rotation of the wheel, such that the mechanism rotates the rotational component in a direction counter to the rotation of the wheel.

Conclusion

It is suggested that Applicants contact the Examiner to discuss the proposed claims and possibly pass this application to issue.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell D. Stormer whose telephone number is (571) 272-6687. The examiner can normally be reached on Monday through Friday, 9 AM to 4 PM.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

11/13/07


RUSSELL D. STORMER
PRIMARY EXAMINER 11/13/07

| | | | | |
|-----------------------------------|---------------------------------------|--|--|-------------|
| Notice of References Cited | Application/Control No. 10/711,292 | | Applicant(s)/Patent Under Reexamination JOHNSON ET AL. | |
| | Examiner Russell D. Stormer | | Art Unit 3617 | Page 1 of 1 |

U.S. PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Name | Classification |
|---|---|--|-----------------|--------------------|----------------|
| * | A | US-3,155,430 | 11-1964 | SCHINDLER JOHN C | 301/37.25 |
| * | B | US-4,341,035 | 07-1982 | Jaworski et al. | 446/152 |
| * | C | US-3,846,926 | 11-1974 | Sullivan, Harry G. | 40/474 |
| * | D | US-6,443,530 | 09-2002 | Lee, Mei-Chen | 301/37.25 |
| | E | US- | | | |
| | F | US- | | | |
| | G | US- | | | |
| | H | US- | | | |
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FOREIGN PATENT DOCUMENTS

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NON-PATENT DOCUMENTS

| * | | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
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